In the claims:

Amend claims 1 and 11-16 as follows:

1. (Amended) A 2000 series aluminum alloy comprising in weight per cent about 3.60 to 4.25 copper, about 1.00 to 1.60 magnesium, about 0.30 to 0.80 manganese, no greater than about 0.05 silicon, no greater than about 0.07 iron, no greater than about 0.06 titanium, no greater than about 0.002 beryllium, the remainder aluminum and incidental elements and impurities, wherein a T_{max} heat treatment is below the lowest incipient melting temperature for a given 2000 series alloy composition and the Cu_{target} is determined by the expression:

$$Cu_{target} = Cu_{eff} + 0.74(Mn - 0.2) + 2.28(Fe - 0.005)$$

wherein said alloy maintains the yield strength and improves by a minimum of 5% compared to the average values of standard 2324-T39 alloy shown in Fig. 1 for the same properties selected from the group consisting of the plane strain fracture toughness, [Kic] K_{Ic}, the plane stress fracture toughness, K_{app}, [S/N fatigue resistance,] the stress intensity factor range, ΔK at a fatigue crack growth rate of 10 μ-inch/cycle wherein R = 0.1 and RH is greater than 90%, [the fatigue crack growth rate] and combinations thereof.

11. (Amended) The 2000 series aluminum alloy of claim 2 wherein said alloy maintains the yield strength and improves by a minimum of 5% compared to the average values of standard 2324-T39 alloy shown in Fig. 1 for the same properties selected from the group consisting of the plane strain fracture toughness, [Kic] K_{Ic}, the plane stress fracture toughness, K_{app}, [S/N fatigue resistance,] the stress intensity factor range, ΔK at a fatigue crack growth rate of 10 μ-inch/cycle wherein R = 0.1 and RH is greater than 90%, [the fatigue crack growth rate] and combinations thereof.

12. (Amended) The 2000 series aluminum alloy of claim 2 wherein said alloy maintains the yield strength and improves by a minimum of 5.5% compared to the average values of standard 2324-T39 alloy shown in Fig. 1 for the same properties selected from the group consisting of the plane strain fracture toughness, [Kic] K_{Ic}, the plane stress fracture toughness, K_{app}, [S/N fatigue resistance,] the stress intensity factor range, ΔK at a fatigue crack growth rate of 10 μ-inch/cycle wherein R = 0.1 and RH is greater than 90%, [the fatigue crack growth rate] and combinations thereof.

13. (Amended) The 2000 series aluminum alloy of claim 2 wherein said alloy maintains the yield strength and improves by a minimum of 6% compared to the average values of standard 2324-T39 alloy shown in Fig. 1 for the same properties selected from the group consisting of the plane strain fracture toughness, [Kic] K_{Ic}, the plane stress fracture toughness, K_{app},[S/N fatigue resistance,] the stress intensity factor range, ΔK at a fatigue crack growth rate of 10 μ-inch/cycle wherein R = 0.1 and RH is greater than 90%, [the fatigue crack growth rate] and combinations thereof.

14. (Amended) The 2000 series aluminum alloy of claim 2 wherein said alloy maintains the yield strength and improves by a minimum of 6.5% compared to the average values of standard 2324-T39 alloy shown in Fig. 1 for the same properties selected from the group consisting of the plane strain fracture toughness, [Kic] K_{Ic}, the plane stress fracture toughness, K_{app}, [S/N fatigue resistance,] the stress intensity factor range, ΔK at a fatigue crack growth rate of 10 μ-inch/cycle wherein R = 0.1 and RH is greater than 90%, [the fatigue crack growth rate]and combinations thereof.

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15. (Amended) The 2000 series aluminum alloy of claim 2 wherein said alloy maintains the yield strength and improves by a minimum of 7% compared to the average values of standard 2324-T39 alloy shown in Fig. 1 for the same properties selected from the group consisting of the plane strain fracture toughness, [Kic] K_{Ic}, the plane stress fracture toughness, K_{app}, [S/N fatigue resistance,] the stress intensity factor range, ΔK at a fatigue crack growth rate of 10 μ-inch/cycle wherein R = 0.1 and RH is greater than 90%, [the fatigue crack growth rate] and combinations thereof.

16. (Amended) The 2000 series aluminum alloy of claim 2 wherein said alloy maintains the yield strength and improves by a minimum of 7.5% compared to the average values of standard 2324-T39 alloy shown in Fig. 1 for the same properties selected from the group consisting of the plane strain fracture toughness, [Kic] K_{Ic}, the plane stress fracture toughness, K_{app}, [S/N fatigue resistance,] the stress intensity factor range, ΔK at a fatigue crack growth rate of 10 μ-inch/cycle wherein R = 0.1 and RH is greater than 90%, [the fatigue crack growth rate]and combinations thereof.

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Please add the following claims:

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--21. The 2000 series aluminum alloy of claim 1 wherein said alloy is in a T-39 temper.

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22. The 2000 series aluminum alloy of claim 1 wherein said alloy is in a T-351 temper.

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23. The 2000 series aluminum alloy of claim 1 wherein said K_{Ic} improves by a minimum of 1.9 ksi$\sqrt{in}$.

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24. The 2000 series aluminum alloy of claim 1 wherein said K_{app} improves by a minimum of 4.9 ksi$\sqrt{in}$.

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25. The 2000 series aluminum alloy of claim 1 where in said ΔK at a fatigue crack growth rate of 10 μ-inch/cycle improves by a minimum of 0.65 ksi$\sqrt{in}$ with R equal to 0.1 and RH greater than 90%.

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26. The 2000 series aluminum alloy of claim 1 wherein said K_{Ic} improves by a minimum of 2.0 ksi$\sqrt{in}$.

17 27. The 2000 series aluminum alloy of claim 1 wherein said K_{app} improves by a minimum of 5.4 ksi$\sqrt{in}$.

18 28. The 2000 series aluminum alloy of claim 1 where in said ΔK at a fatigue crack growth rate of 10 μ-inch/cycle improves by a minimum of 0.71 ksi$\sqrt{in}$ with R equal to 0.1 and RH greater than 90%.

19 29. The 2000 series aluminum alloy of claim 1 wherein said K_{Ic} improves by a minimum of 2.2 ksi$\sqrt{in}$.

20 30. The 2000 series aluminum alloy of claim 1 wherein said K_{app} improves by a minimum of 5.9 ksi$\sqrt{in}$.

21 31. The 2000 series aluminum alloy of claim 1 where in said ΔK at a fatigue crack growth rate of 10 μ-inch/cycle improves by a minimum of 0.80 ksi$\sqrt{in}$ with R equal to 0.1 and RH greater than 90%.

22 32. The 2000 series aluminum alloy of claim 1 wherein said K_{Ic} improves by a minimum of 2.4 ksi$\sqrt{in}$.

23 33. The 2000 series aluminum alloy of claim 1 wherein said K_{app} improves

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by a minimum of 6.4 ksi√in.

24 34. The 2000 series aluminum alloy of claim 1 where in said ΔK at a fatigue crack growth rate of 10 μ-inch/cycle improves by a minimum of 0.85 ksi√in with R equal to 0.1 and RH greater than 90%.

25 35. The 2000 series aluminum alloy of claim 1 wherein said K_{Ic} improves by a minimum of 2.6 ksi√in.

26 36. The 2000 series aluminum alloy of claim 1 wherein said K_{app} improves by a minimum of 6.9 ksi√in.

27 37. The 2000 series aluminum alloy of claim 1 where in said ΔK at a fatigue crack growth rate of 10 μ-inch/cycle improves by a minimum of 0.90 ksi√in with R equal to 0.1 and RH greater than 90%.

28 38. The 2000 series aluminum alloy of claim 1 wherein said K_{Ic} improves by a minimum of 2.8 ksi√in.

29 39. The 2000 series aluminum alloy of claim 1 wherein said K_{app} improves by a minimum of 7.4 ksi√in.

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